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REMARKS

Entry of this Amendment is proper under 37 C.F.R. §1.116, since no new claims or issues are raised.

It is noted that, notwithstanding any claim amendments made herein, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

Claims 1-20 are all the claims presently pending in the application. Claims 1-7, 10, 11, and 18 stand rejected under 35 U.S.C. §103(a) as unpatentable over US Patent 6,456,714 to Shima et al., further in view of US Patent 6,496,862 Akatsu et al. Claims 8, 9, 19, and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Shima, further in view of US Patent 4,747,130 to Ho.

The Examiner has made a constructive election and withdrawn claims 12-14, 16, and 17. Applicant submits that such constructive withdrawal of claims would be improper for at least dependent claims 12, 13, 14, since dependent claims inherently narrow the scope of coverage of the parent claims, and the Examiner has already done a search for the independent claims. Therefore, these dependent claims can be no additional burden on the Examiner and would be automatically allowable if for no reason than dependency, once the independent claims are deemed allowable.

Relative to claims 16 and 17, Applicant has removed the "plug and play" terminology and clarified the limitation language to describe a system in which the prior art does not teach or suggest.

Therefore, Applicant respectfully declines at this time to cancel these claims that the Examiner has constructively withdrawn.

The prior art rejections are respectfully traversed in view of the following discussion.

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I. THE CLAIMED INVENTION

As described in the specification and claimed, for example by claim 1, the present invention is directed to a network switching system, including a gateway, one or more extension nodes, and a serial bus interconnecting the gateway and the one or more extension nodes. Each of the extension nodes is selectively (potentially) identified with a unique telephone number. Stream data transferred on a serial bus are exchanged through a gateway between an outside line and an extension node, or between a first extension node and a second extension node.

At least one of the extension nodes includes a control/memory unit for storing physical identifiers and telephone numbers of the gateway node and extension nodes and for controlling the network, an asynchronous interface, for selecting the extension node and controlling a switching timing, connected with the control/memory unit, a rate conversion unit for converting a data rate of the stream data in the network into that in the outside line, or for converting a data rate of stream data in the outside line into that of the network switching system, and an isochronous interface, for transmitting and receiving the stream data, connected with the rate conversion unit.

In contrast, as clearly described at lines 5-7 of column 5, the telecommunications system taught in Shima has a single telephone number for the entire multimedia network 100 attached to the peripheral device 230.

An advantage of the present invention is that it provides a low cost method to incorporate a telephone system into the existing capability of the serial IEEE 1394 bus in the environment of a home entertainment system, including the feature that a plurality of nodes in the home entertainment system can each have a unique telephone number. Thus, the present invention provides a miniature telephone system for a home environment that has switching capability between extension nodes as well as outside calls, using the infrastructure of a home entertainment system.

The present invention thereby provides the advantage of low cost switching equipment for telephone voice and or video, in addition to its customary deployment

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as a distribution system for interconnecting computers and computer peripheral devices such as printers or audio/video system interconnections, while simultaneously taking advantage of the capability for reducing the number of interconnect wires and providing good quality audio, along with a "plug and play" capability.

II. THE PRIOR ART REJECTIONS

The Examiner alleges that Shima, when combined with Akatsu, renders obvious claims 1-7, 10, and 11, and, when combined with Ho, renders obvious claims 8 and 9.

Applicant continues to respectfully disagree.

First, relative to the rejection for claims 1 and 7, the present invention incorporates a memory in the extension node terminal that stores the physical identifiers and telephone numbers of the gateway node and the extension nodes in the system.

In contrast, as clearly described at lines 5-7 of column 5, the telecommunications system taught in Shima has a single telephone number for the entire multimedia network 100 attached to the peripheral device 230. The Examiner's reliance on lines 4-46 of column 7 is misplaced, since these lines do not describe multiple simultaneous calls. Rather, these lines clearly describe a scheme to allocate bandwidth for the incoming calls. This problem is entirely different from that of stating that each extension node selectively (potentially) is associated with its unique telephone number, thereby allowing each such node to serve as a stand-alone telephone node.

The Examiner's reliance upon lines 16-20 of column 5 is also misplaced, since these lines clearly state that the peripheral device 230 can send an incoming call indication (e.g., a ring signal) to only those consumer electronics devices capable of receiving voice signals. Again, although it may be true that each such consumer electronics device might have a unique identification number within the network, this description is quite different from that of having each such consumer electronic device

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has a separate, unique telephone number, so that each such device can be separately called as a telephone number from another telephone.

This feature that is not taught or suggested in Shima, Akatsu, or Ho. It is noted that an Examiner's prior art evaluation is bound to the plain meaning of the claim language, as would be interpreted by one having ordinary skill in the art. More specifically, the initial burden has not been met unless the Examiner is able to point to this feature of the present invention as being found in the prior art of record.

Although Shima provides the capability for a telephone interface with the multimedia network 100, this capability is for a single number for the entire network (e.g., see lines 5-9 of column 5), so that any multimedia device having a telephone interface incorporated therein can receive/originate telephone communications, using the single telephone number that identifies the entire multimedia network 100.

This concept of Shima is quite different from that of the present invention in which each extension node can be a separately-identified telephone node with its own unique telephone number. The present invention thereby allows the various extension nodes to call each other, similar to an intercom system, in addition to placing and receiving telephone calls to and from telephones on the external telephone system, using the unique telephone number assigned to that extension node.

Hence, turning to the clear language of claim 1, there is no teaching or suggestion of: "...one or more extension nodes, each selectively identified with a unique telephone number; ... wherein at least one said extension node comprise: a control/ memory unit for storing physical identifiers and telephone numbers of said gateway node and extension nodes and for controlling said network."

Independent claims 5, 6, and 7 have similar language to describe this concept of individual telephone numbers assigned to each extension node, rather than a multimedia network in its entirety.

Relative to the rejection currently of record for claims 8 and 9, this rejection ignores the following evaluation guideline of MPEP 2141.02: "*In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is*

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not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." (Emphasis in MPEP itself)

It is again submitted that Ho is not properly combinable with Shima, since the secondary reference Ho is intended for an environment that has no central controlling processor. Shima clearly uses peripheral device 230 as the central controlling processor and would not, therefore, require or benefit from the technique of Ho in order to hunt for attached resources. The Examiner cannot simply ignore the technical realities and engineering of the prior art references.

It is also submitted that Glowney would not be properly combinable with Shima, since, as pointed out above, Shima fails to have unique telephone numbers for the extensions.

For the reasons stated above, the claimed invention is fully patentable over the cited references.

Further, the other prior art of record has been reviewed, but it too, even in combination with Akatsu, Ho, fails to teach or suggest the claimed invention.

III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-20, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

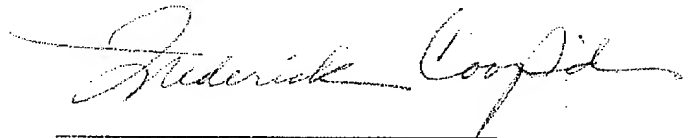
Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

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The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

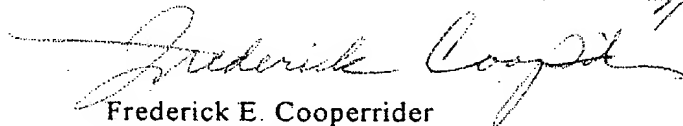
Date: 7/16/04

Frederick E. Cooperrider
Reg. No. 36,769

McGinn&Gibb, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, VA 22812
(703) 761-4100
Customer No. 21254

CERTIFICATION OF TRANSMISSION

I certify that I transmitted via facsimile to (703) 872-9306 this Amendment under 37 CFR §1.116 to Examiner D. Ryman on July 16, 2004.



Frederick E. Cooperrider
Reg. No. 36,769